UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,139	08/19/2003	James Arthur Fisher	TUC920030072US1	6485

45216 7590 12/27/2006	EXAMINER
KUNZLER & ASSOCIATES 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111	MCLEAN MAYO, KIMBERLY N

	ART UNIT	PAPER NUMBER
	2187	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 December 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>3/20/2006</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The enclosed detailed action is in response to the Amendment submitted on December

23, 2005.

Drawings

2.   Figures 1-2 should be designated by a legend such as --Prior Art-- because only that

which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37

CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective

action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.   Claims 1-9 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

5.   Claim 1 recites the limitation "the storage device" in line 7. There is insufficient

antecedent basis for this limitation in the claim.

6.   Claim 8 recites the limitation, " a select data transaction command". It is not clear from

the claim or the specification what this command is. The Examiner has interpreted this

command to mean a retrieve/read command.

7.   Claim 30 is dependent upon itself.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

9.   Claims 1, 4-16, 19, 22-24 and 27-29 and 10 are rejected under 35 U.S.C. 102(b) as being

anticipated by Carlson (USPN: 5,544,304).

Regarding claim 1, Carlson discloses a communication module configured to receive a directive

to transition library management functions from a first library manager to a second library

manager, wherein the communications module is further configured to communicate with the

first library manager, the second library manager, and the host (C 4, L 10-13; the

software/hardware in the library system which detects a failure and initiates an error recovery

procedure [switchover], the library system communicates with the host via command source,

Figures 1 and 3); a control module configured to direct the first library manager to reject data

transaction commands while maintaining the storage device in a state responsive to data

transactions actions (C 4, L 42-54; C 3, L 30-61; the control module directs the first library

manager to go off-line, thereby effectuating the rejection of data transaction commands; the

storage device is maintained in a state responsive to data transactions actions via processing of

the data transactions by the second library manager); to suspend the library management function

of the first library (C 4, L 44-45) and activate the library management function of the second

library manager (C 4, L 42-43).

Regarding claim 4, Carlson discloses the first library manager is configured to store an accepted

data transaction command (C 3, L 6-51; C 5, L 39-41).

Regarding claim 5, Carlson discloses the first library manager is configured to execute a

previously accepted data transaction command (C 4, L 51-54).

Regarding claim 6, Carlson discloses the control module is configured to terminate the

processing of the previously accepted data transaction command (C 4, L 10-13, L 42-45; when

the manager/controller fails during processing of a previously accepted command the processing

of the command is terminated).

Regarding claim 7, Carlson discloses the control module is configured to transfer accepted data

transaction commands from the first library manager to the second library manager (C 4, L 4-6).

Regarding claim 8, Carlson discloses the first library manager is configured to accept a select

data transaction command type (retrieve command; C 4, L 4-6; the commands accepted by the

library managers include commands to access the library, i.e. read/write requests).

Regarding claim 9, Carlson discloses the control module is configured to terminate the library manager transition (C 4, L 51-54; when the failed manager/controller is resumed the transition to the second manager is terminated).

Regarding claims 10 and 15, Carlson discloses a storage device responsive to a first library manager and a second library manager, wherein the storage device retrieves and stores data (Figure 3; library); and a transition module configured to receive a directive for a library manager transition; command the first library to reject data transaction commands and maintain the storage device responsive to data transaction commands (C 4, L 42-54; C 3, L 30-61; the control module directs the first library manager to go off-line, thereby effectuating the rejection of data transaction commands; the storage device is maintained in a state responsive to data transactions actions via processing of the data transactions by the second library manager) and command the second library manager to receive data transaction commands [this occurs when the second [standby] manger is activated (C 4, L 42-43).

Regarding claim 16, Carlson discloses the first library manager is further configured to accept a select data transaction command type during a library manager transition (C 3, L 6-51; C 5, L 39-41).

Regarding claims 12, 19 and 24, Carlson discloses means for managing a data transaction command and completing a data transaction command (C 3, L 32-33; Figure 2, References 12,

14); means for rejecting a data transaction command and maintaining the completing means responsive to data transaction commands (C 4, L 42-54; C 3, L 30-61; the control module directs the first library manager to go off-line, thereby effectuating the rejection of data transaction commands; the storage device is maintained in a state responsive to data transactions actions via processing of the data transactions by the second library manager); means for suspending the library management functions of a first managing means (C 4, L 44-45); and means for activating the library management functions of a second managing means (C 4, L 42-43). Additionally, regarding claim all hardware devices are controlled/managed by software and thus it is evident that Carlson discloses software to effectuate the above features via the hardware.

Claims 11 and 27 are rejected for the same rationale applied to claim 8 above.

Claims 13 and 24 are rejected for the same rationale applied to claim 4 above.

Claims 14, 22 and 29 are rejected for the same rationale applied to claim 5 above.

Claims 23 and 30 are rejected for the same rationale applied to claim 6 above.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (USPN: 5,544,304) in view of Carlson PGPUB: US 2003/0217078).

Carlson ('304) discloses the limitations cited above, however, Carlson does not disclose a timing module configured to receive a timeout directive and to initiate a timeout period, wherein the control module is configured to suspend the library management function of the first library manager responsive to the completion of the timeout period. Carlson ('078) discloses a timing module configured to receive a timeout directive and to initiate a timeout period. This features taught by Carlson ('078) provides improved performance by providing maintenance to the system at optimal time. In Carlson's ('304) system, database maintenance is performed only when a failure occurs. However, the system could benefit by performing maintenance at other times, such as when the first library manager is operating slow, etc. Hence, it would have been obvious to one of ordinary skill in the art to include Carlson's ('078) teachings in the system taught by Carlson ('304) such that the system includes a timing module configured to receive a timeout directive and to initiate a timeout period, wherein the control module is configured to suspend the library manager of the first library manager responsive to the completion of the timeout period the desirable purpose of improved performance.

12.. Claims 17-18, 20-21 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (USPN: 5,544,304) in view of Matsunami et al. (USPN: 6,006,308).
Regarding claims 17, 20-21 and 25-26, Carlson discloses the limitations cited above , however, Carlson does not disclose notifying a host computer that the library manager transition is in process or that the transition process has completed. Matsunami discloses notifying a host computer that the library manager transition is in process (C 13, L 12-21; when the library controller fails, the host is notified and a transition/substitution is performed, thus whenever a

library controller fails, the system begins the transition process and thus is notified of such when a failure occurs) and that the process has completed (C 13, L 12-21; when the substitution is complete, the host is able to determine that the process is complete since the host provides this information to the RAIL controller). This feature enhances reliability by alerting the host of the status. In Carlson system, if both controllers were to fail, the host would not be informed of such and the system would not be able to recover from such an event. Hence, it would have been obvious to one of ordinary skill in the art to notify the host in Carlson's system of a library transition for the desirable purpose of increased reliability.

Regarding claim 18, Carlson discloses suspending the library manager transition (C 4, L 51-54; when the failed manager/controller is resumed the transition to the second manager is suspended); directing the first library manager to accept data transaction commands (C 4, L 51-54). Carlson does not disclose notifying the host that the first library manager is accepting command data transaction commands. However, Matsunami discloses informing the host of the status of the system (C 13, L 12-21). This feature enhances reliability by alerting the host of the status. Hence, it would have been obvious to one of ordinary skill in the art to notify the host in Carlson's system of a library transition for the desirable purpose of increased reliability.

Response to Arguments

13. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.
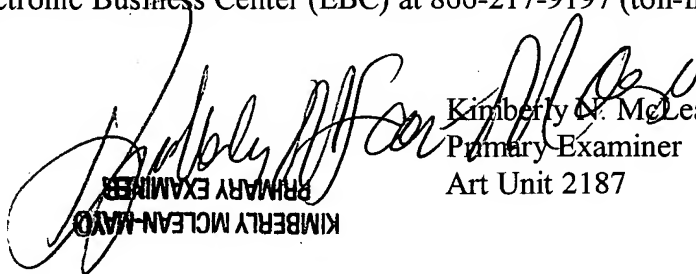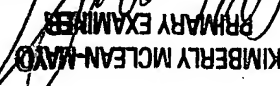
Conclusion

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kimberly N. McLean-Mayo whose telephone number is 571-272-

4194. The examiner can normally be reached on Mon, Wed, Thurs (10-4), Tues (9:45 - 6:15).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly N. McLean-Mayo
Primary Examiner
Art Unit 2187

KNM

March 20, 2006